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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,897	09/22/2000	Sandeep Sharma	135614	2192

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EXAMINER	
SHEW, JOHN	

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/668,897	SHARMA ET AL.	
	Examiner	Art Unit	
	John L Shew	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-12 is/are rejected.

7)☒ Claim(s) 3-6, 10-14 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 6.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 3 and 4 recite the limitation "for the period" is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

2. Claim 5 recites the limitation "threshold types of alarms" is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 6 recites the limitation "QoS types of alarms" is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 10 cites an element management system wherein a signal is sent to stop sending a "specific type of threshold crossing alarm".
Claim 12 cites an element management system wherein a signal is sent to stop sending "all QoS alarms".

Claim 13 cites an element management system wherein signals to stop alarm transmission includes the limitations "specified types of threshold alarms", "all threshold alarms", "all QoS alarms" and "all alarms".

There is insufficient antecedent basis for these limitations in the claim. No prior description of alarms were taught in parent claim 9.

5. Claims 11 and 14 cites an element management system wherein a network element is instructed to "stop sending threshold crossing alerts". There is insufficient antecedent basis for this limitation in the claim. No prior description of alerts were taught in parent claim 9.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angal et al. in view of Ren et al.

Claims 1 and 7, Angal teaches a method for managing a plurality of network elements (Abstract lines 1-13, column 1 lines 38-46) comprising receiving a plurality of quality of service alarms from a plurality of alarms (column 1 lines 53-65). Angal does not teach the determination of the network element generating the greatest number of alarms nor

instructing the network element to stop sending the alarms. Ren teaches determination of the network element generating the greatest data rate (column 4 lines 32-42, column 4 lines 48-56) referenced by association of a virtual input queue to an input port which is connected to a unique device and the exceeding of a memory value for the virtual input queue. Ren further teaches instructing the network element generating the greatest number data rate to stop sending the data (column 4 lines 50-67, column 5 lines 1-2) referenced by the pausing of an upstream device which exceeded the memory value of the virtual input queue to stop data transfers. The data being the equivalent of the applicant's alarms since alarms are a form of data. Further, Ren teaches reactivating a paused device if a virtual input queue containing data drops below a lower threshold value (FIG. 6b step 392, step 394). It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to incorporate the upper/lower threshold flow control method of Ren to the network management system of Angal for the purpose of reducing congestion of excessive messages from a particular network device.

2. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable. Angal does not teach instructing the network element to stop sending the alarms. Ren teaches instructing an upstream device to stop transmitting data for a time period (column 4 lines 62-67, column 5 lines 1-2). Ren does not disclose expressly the limitation specific time period of 600 seconds. Applicant has not disclosed that a period of 600 seconds provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, it would have been obvious to chose a

time period which is optimized for relieving congestion. Hence, 600 seconds would have been obvious through ordinary test to find the optimized time value for a particular system. Claim 3 has a limitation of "for the period", which is indefinite based on the dependency to claim 1. The limitation will be interpreted to "for a period". Ren teaches instructing an upstream device to stop transmitting data for a time period (column 4 lines 62-67, column 5 lines 1-2) referenced by pausing the upstream device for a predetermined period of time. It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to incorporate pausing an upstream device control method of Ren to the network management system of Angal for the purpose of reducing congestion of excessive messages from a particular network device.

3. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable. Claim 4 has a limitation of "for the period", which is indefinite based on the dependency to claim 1. The limitation will be interpreted to "for a period". Angal does not teach a type of alarm nor a time period. Ren teaches instructing an upstream device to stop transmitting data for a time period (column 4 lines 62-67, column 5 lines 1-2) referenced by pausing the upstream device for a predetermined period of time. The data is equated to the alarm events taught by Angal (column 1 lines 53-65), inclusive of communications alarms, quality of service alarms, security alarms and attribute changes. It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to incorporate pausing an upstream device control method

of Ren to the network management system of Angal for the purpose of reducing congestion of excessive messages from a particular network device.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable. Angal teaches threshold types of alarms (column 1 lines 53-65), referenced as quality of service alarms due to deterioration of the strength or resolution or throughput of a signal. The measurement of signal strength inherently defines a threshold level to determine an alarm.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable. Angal does not teach a lower threshold value to reactivate a paused device. Ren teaches a lower threshold value (FIG. 6b step 392). Ren does not disclose expressly a lower threshold value of 3. Applicant has not disclosed that a lower threshold value equal to 3 provides an advantage, is used for a particular purpose, or solves a stated problem. The lower threshold value equated to 3 is not critical to the applicant's invention. One of ordinary skill in the art, it would have been obvious to set a lower threshold value of 3 to optimize the reduction of alarm congestion over the network. The value would have been obvious through ordinary test to optimize the particular system.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angal et al. in view of Sorber.

Claim 9, Angal teaches an element management system (column 1 lines 38-46) referenced by TMN comprising a processor (FIG. 6) referenced by PROCESSOR 210, a store for storing computer instructions that define operational logic of the element management system (FIG. 6) referenced by MAIN MEMORY 212. Angal further teaches the element management system listens to events inclusive of QoS alarms (column 1 lines 46-65). Angal does not teach the issuance of a signal to stop sending QoS signals. Sorber teaches the transmission of messages based on different priorities (column 2 lines 21-25) wherein different priority levels equate to quality of service. Higher service levels will be associated with higher priority signals. Further, Sorber teaches the issuance of a signal to stop sending messages (column 2 lines 41-48) referenced by the request that one or more message sources stop sending messages for transmission. It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to modify the network management platform of Angal to issue a stop signal for different priority levels for the purpose of reducing congestion levels in the network. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

2. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable. Angal does not teach sending a signal to the network element to stop sending a specific type of threshold crossing alarm. Sorber teaches the transmission of messages based on different priorities (column 2 lines 21-25) wherein different priority levels equate to quality of service. Further, Sorber teaches the assignment of different buffers to different message priorities (column 2 lines 26-31). Finally, Sorber teaches the issuance of a signal to stop sending messages (column 2 lines 41-48) referenced by the request that one or more message sources stop sending messages for transmission based on the associated priority buffers. Specific priority levels is equated to specific type of threshold crossing alarms. Claim 11 cites the limitation "threshold crossing alerts" which is indefinite based on the dependency to claim 9. The limitation will be interpreted to "threshold crossing alarms". It would have been obvious to combine the buffers to a single one to consolidate the alarms for the purpose of sending a single signal to stop all alarms. It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to modify the network management platform of Angal to issue a stop signal for different priority levels for the purpose of reducing congestion levels in the network. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable. Angal does not teach sending a signal to the network element to instruct it to stop sending all QoS

alarms. Claim 12 cites the limitation "QoS alarms" which is indefinite based on the dependency to claim 9. The limitation will be interpreted as "QoS signals". Angal does not teach the issuance of a signal to stop sending QoS signals. Sorber teaches the transmission of messages based on different priorities (column 2 lines 21-25) wherein different priority levels equate to QoS or quality of service. Further, Sorber teaches the issuance of a signal to stop sending messages (column 2 lines 41-48) referenced by the request that one or more message sources stop sending messages for transmission, further it would have been obvious to combine the different priorities to a single priority, thus a single signal can be sent to the network element to stop all priority messages. It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to modify the network management platform of Angal to issue a stop signal for all priority levels for the purpose of reducing congestion levels in the network. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

Allowable Subject Matter

1. Claims 13 and 14 would be allowable if rewritten to overcome the objects above set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art search discloses cessation of alarms based on criteria such as type, priority, threshold. It did not disclose the unique order to which the alarms must cease

as cited in claim 13. Further it does not disclose the cessation of alarms by the first network element followed by the exact sequence of alarm cessation by a second network element.

Citation of Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tentij teaches a network management system incorporating escalation based on alert severity levels.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Shew whose telephone number is 703-305-8708. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

js

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